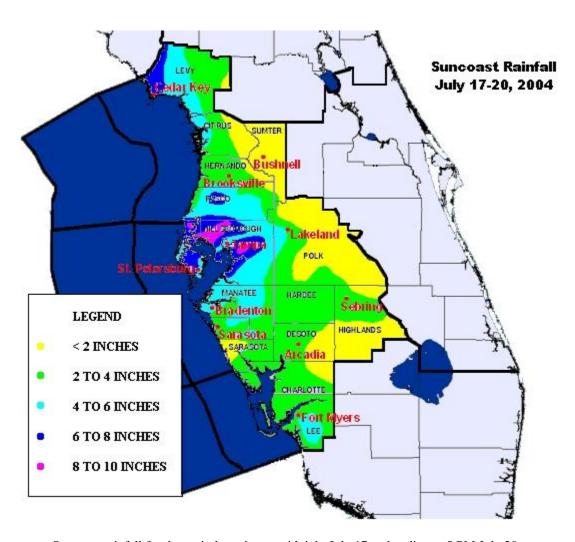
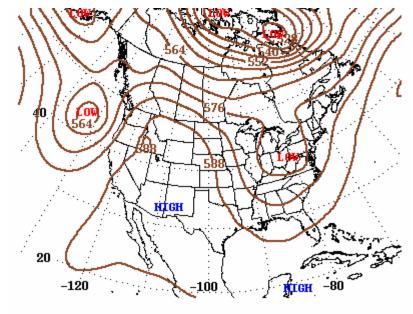
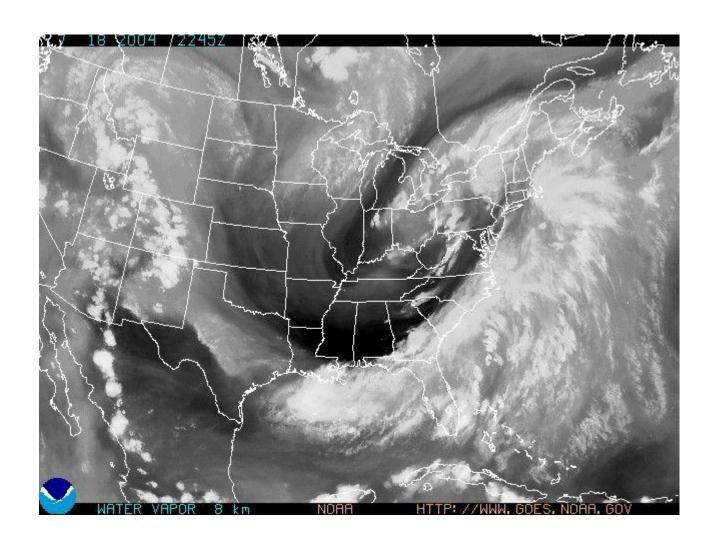
## Welcome Rains Soak Tampa Bay Area

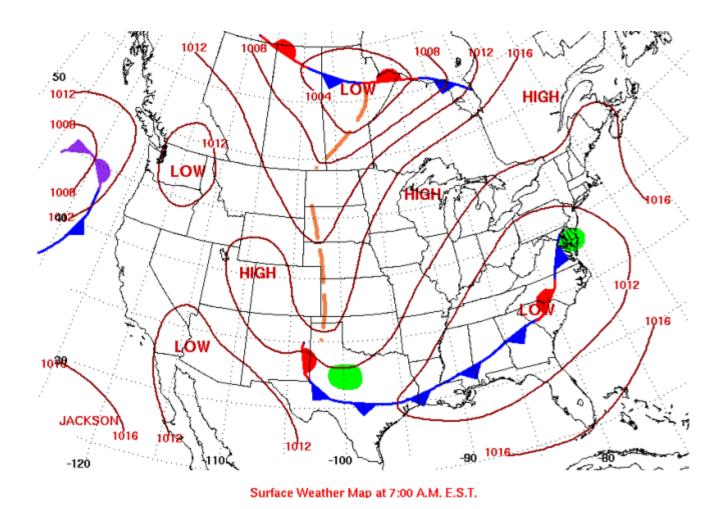


Suncoast rainfall for the period starting at midnight July 17 and ending at 5 PM July 20.



500-Millibar Height Contour at 7:00 A.M. E.S.T.





At top: 500 millibar chart, 7 AM EDT July 18th, 2004. Note the unusually strong trough, for mid July, over the eastern U.S. Center: NOAA Geostationary Satellite (GOES) water vapor image, for the eastern two thirds of the U.S. Note the frontal zone moisture off the U.S. eastern seaboard, with tail extending into the central Gulf. At bottomt: Surface chart, 7 AM EDT July 18th, 2004, with stationary front and broad low pressure area over the Southeast U.S.

After a rather long dry spell to begin July for many along the immediate coast, as well as around portions of Tampa Bay, a fairly deep eastern U.S. trough (above left) for several days in mid July. At the base of the trough, west to southwest flow of air over very warm (upper 80s) eastern Gulf waters helped produce numerous showers and thunderstorms, each with brief torrential rains, for the coastal counties. For the 17th through 19th, the heaviest rains were generally from Tampa Bay north to the Nature Coast, shifting over and south of Tampa Bay by the 20th.

Unlike the summer of 2003, when eastern U.S. troughs routinely dipped south into the eastern Gulf and Florida, this event broke the prolonged period of flat upper level ridging which had kept rainfall totals below normal for many coastal areas. Was this the beginning of a general pattern shift, or just a temporary aberration? Stay tuned.

## ... HEAVY RAINS ACROSS PORTIONS OF THE SUNCOAST...

AFTER A RATHER TYPICAL FIRST HALF OF JULY WITH PARTLY CLOUDY SKIES AND SCATTERED MAINLY AFTERNOON AND EVENING THUNDERSTORMS EACH DAY... THE LAST FOUR DAYS HAVE SEEN MAINLY CLOUDY SKIES WITH PERIODS OF SHOWERS AND THUNDERSTORMS ACROSS A LARGE PORTION OF THE SUNCOAST. THIS WAS DUE TO AN UPPER LEVEL TROUGH PARKED OVER THE EASTERN UNITED STATES...COMBINED WITH DEEP MOISTURE AND A SERIES OF ATMOSPHERIC DISTURBANCES.

THE HEAVIEST RAINS FELL ACROSS MAINLY THE COASTAL COUNTIES FROM THE TAMPA BAY AREA NORTHWARD WHERE AMOUNTS EXCEEDED 8 INCHES IN SEVERAL LOCATIONS. ELSEWHERE...THE RAIN AMOUNTS WERE GENERALLY LESS THAN 3 INCHES.

SOME MINOR FLOODING WAS REPORTED ACROSS THE REGION...BUT SINCE ONLY LIMITED AMOUNTS OF RAINFALL OCCURRED DURING THE PREVIOUS COUPLE OF WEEKS THE GROUND WAS ABLE TO ABSORB MOST OF THE RAIN WITH THE MAJORITY OF THE FLOODING OCCURRING IN LOW LYING AND POOR DRAINAGE AREAS. ALSO...A FEW OF THE RIVERS ROSE...BUT ONCE AGAIN SINCE IT HAD BEEN RATHER DRY...VERY LITTLE RIVER FLOODING WAS OBSERVED.

FOLLOWING ARE PRELIMINARY AND UNOFFICIAL TOTALS FOR THE EVENT FROM MIDNIGHT SATURDAY JULY 17 THROUGH 5 PM TUESDAY JULY 20 AT SELECTED LOCATIONS ACROSS WEST CENTRAL AND SOUTHWEST FLORIDA:

OBSERVING SITE	COUNTY	EVENT TOTAL
		(INCHES)
AIRPORTS		
TAMPA INTL	HILLSBOROUGH	8.04
MACDILL AIR FORCE BASE	HILLSBOROUGH	6.20
FORT MYERS/SW FLORIDA INTL		4.82
LAKELAND LINDER	POLK	4.38
FORT MYERS/PAGE FIELD	LEE	3.51
PUNTA GORDA/CHARLOTTE CO	CHARLOTTE	2.90
ST PETE/ALBERT WHITTED	PINELLAS	2.84
SARASOTA-BRADENTON INTL	MANATEE	2.77
BROOKSVILLE/HERNANDO CO	HERNANDO	2.72
WINTER HAVEN/GILBERT FIELD	POLK	1.41
OTHERS		
LAKE TARPON	PINELLAS	8.47
RIVERVIEW	HILLSBOROUGH	8.41
SAFETY HARBOR	PINELLAS	8.19
LUTZ	HILLSBOROUGH	8.16
CLEARWATER	PINELLAS	8.06
PINELLAS PARK	PINELLAS	8.01
TARPON SPRINGS	PINELLAS	7.92
BLOOMINGDALE	HILLSBOROUGH	7.81
HOLIDAY 5 E	PASCO	7.50
LAKE FERN	HILLSBOROUGH	7.39
LITHIA	HILLSBOROUGH	6.40
THONOTOSASSA	HILLSBOROUGH	6.38

PLANT CITY GOWERS CORNER 2 N CHIEFLAND 5 SE SARASOTA (DOWNTOWN) WIMAUMA APOLLO BEACH PALMA SOLA INGLIS CRYSTAL RIVER 4 S RUSKIN/NWS WARES CREEK BROOKSVILLE 8 NNW SARASOTA 5 ESE LAKE GIBSON WAUCHULA 9 SW POINT LONESOME SIESTA KEY MYAKKA CITY BOWLING GREEN MASARYKTOWN 5 W SAN ANTONIO ENGLEWOOD 4 NNW MULBERRY CHASSAHOWITZKA FOUR CORNERS WILLISTON		HILLSBOROUGH MANATEE LEVY CITRUS	6.18 6.08 5.25 5.22 4.86 4.83 4.73 4.51 4.02 3.82 3.66 3.58 3.50 3.44 3.35 3.20 3.18 3.02 2.99 2.92 2.64 2.60
GARDNER NORTH PORT		HARDEE SARASOTA	2.47 2.31
DADE CITY 10 E (GREEN	SWAMP)	SUMTER	2.18
NOCATEE		DESOTO	2.14
SADDLE CREEK PARK		POLK	2.13
HOLDER (WITHLACOOCHEE FLORAL CITY	RVR)	CITRUS	1.91 1.89
FORT OGDEN		DESOTO	1.81
FORT MEADE		POLK	1.76
BARTOW		POLK	1.52
BROOKSVILLE CHIN HILL		HERNANDO	1.52
LAKE PANASOFFKEE		SUMTER	1.37
TRILBY (WITHLACOOCHEE	RVR)	HERNANDO	1.37
VENICE 3 NE		SARASOTA	1.32
FORT OGDEN 14 E		DESOTO	1.19
FROSTPROOF		POLK	1.19
COLEMAN 2 W		SUMTER	0.91
BUSHNELL		SUMTER	0.72

FOR MORE CLIMATE INFORMATION VISIT OUR WEB SITE AT THE FOLLOWING ADDRESS: HTTP://WWW.SRH.NOAA.GOV/TBW/ AND THEN CLICK ON THE PAST LOCAL WEATHER LINK.

\$\$ PRC